CLASS 238, RAILWAYS: SURFACE TRACK

SECTION I - CLASS DEFINITION

This class includes patents relating to surface railway-tracks which in their make-up include road-bed structure, rail-supporting elements--such as stringers, ties, rail-chairs, and tie-plates--rails, rail-joints, rail-bonds, track and rail-joint fastenings, and electric insulation as applied to ties, rails, rail-joints, rail-bonds, and track-fastenings.

SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

This class does not include patents for switches, rail-crossings, and frogs, which will be found in Class 246, Railway Switches and Signals.

Tracks for panel hangers and travelers are in Class 16, Miscellaneous Hardware, subclass 96.

SUBCLASSES

1 This subclass is indented under the class definition. Patents containing subject matter not properly belonging in any of the following subclasses.

2 This subclass is indented under the class definition. Railroad ballast structure and form for the reception of the railway-track.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

3 This subclass is indented under subclass 2. Street-railway track having defined ways for nonflanged vehicle-wheels and ordinary street-vehicles.

4 This subclass is indented under subclass 3. Structure that is restricted to track using metallic rails or paths for the wheels.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

5 This subclass is indented under subclass 3. Structure that is restricted to track using concrete or plastic-compound rails or paths for the wheels.

6 This subclass is indented under subclass 2. Structure wherein the surface of the road-bed has a continuous wooden or metal covering between the rails, or the covering may also extend outside the rail-bases.

7 This subclass is indented under subclass 6. Structure wherein the road-bed covering is of concrete or other plastic compound.

8 This subclass is indented under subclass 2. Highway crossings at grade over railways to facilitate the passage of highway vehicular traffic over railway-tracks.

SEE OR SEARCH THIS CLASS, SUBCLASS:
9,

9 Special forms of paving and paving-blocks for use around railway-rails in order to bring the rail-treads substantially flush with a highway-surface, so that the rails shall not obstruct highway traffic, as in the case of street-railway tracks.

SEE OR SEARCH THIS CLASS, SUBCLASS:
7,

10 Railway-track designed for temporary use in different places and usually made in portable sections.

SEE OR SEARCH CLASS:
446, Amusement Devices: Toys, subclasses 168+ for a toy trackway for an unattached rolling or tumbling element (e.g., marble), subclasses 444+

for the combination of a toy vehicle and toy trackway for physically guiding the vehicle, and subclass 455 for a toy vehicle combined with trackway having a conductor therealong which transmits control signals to the vehicle.

11 Portable railway-track, usually adapted to hang over the edge or end of an embankment or fill to facilitate the dumping of earth or spoil thereover.

12 Portable switch members for temporary connection of two parallel railway-tracks.

13 Portable track for house-moving trucks or rollers.

14 Mats or traction-pads adapted to facilitate the extraction of trucks and automobiles when stalled in sand or mud.

(1) Note. One end of the mat is usually fastened to the ground.

SEE OR SEARCH CLASS:
152, Resilient Tires and Wheels, subclass 208 and indented subclasses.or anti-skid devices for resilient tires.
180, Motor Vehicles, subclasses 7.1+ for similar structures designed to be attached to a traction wheel.

14.05 Joints, couplings, rail-bonds, connector devices and other means for electrically connecting a railway rail or other surface track element to another rail or to some other stationary device or object.

(1) Note. A “rail-bond” as used herein is any connecting link, wire, cable, rod, bar, or the like, of conducting material, either rigid or flexible, having terminal portions designed for attachment to adjacent rail sections for the purpose of electrically connecting such sections.

(2) Note. For electrical connection features associated or designed for use with portable track, see the Search This Class, Subclass, notes below.

(3) Note. Mere mechanical joints designed to join two railway rails together in aligning relation for maintenance of the continuity of the track are in another subclass, even though such joints, when made of metal, inherently serve to electrically connect the rails (see Search This Class, Subclass below for specific cite). When such mechanical joints are provided with additional claimed features designed primarily to improve the conducting path between the rails, they will be placed in this class, subclass 14.4, or indented subclasses, and cross-referenced to the appropriate subclass for the mechanical joint.

(4) Note. For electrical connectors in general see Search Class notes below.

(5) Note. For electrical connection devices specially designed for transmitting electricity from a rail or other element to a vehicle or other moving object, see Search Class notes below.

(6) Note. Mere joints or couplings between wires, rods, bars and the like, or between such elements and a base, plate of head, are in Class 403, Joints and Connections. However, where one of the elements or such a joint or coupling is a railway rail or other surface track element, the following line will determine the placement of patents as between Classes 238 and 403; where the rail or other surface track element is included broadly, as by name only, with no further limitation distinguishing the same from plates, bars, etc., in general, classification is in Class 403, subclasses 230+; the following are considered to distinguish rail-bond joints from the joints classifiable in Class 403 and to cause classification in Class 238:

(a)an electrical limitation to the effect that the joint or coupling is electrically conductive or that the parts connected are electric conductors;

(b)significant structure of the rail-bond body other than the terminal or attaching portions;

(c)inclusions, broadly or specifically, of the particular portion of the rail to which the bond is attached, as, for example, the head or tread portion or the base or flange portion, excepting that the mere limitation that the bond is secured to the "web" of the rail will not prevent classification in Class 403;

(d)all plural-joint features, regardless of breadth, e.g., inclusion of both rails or both of the bond terminals;

(e)all other features specialized to railbed or surface track installations or pertaining to vehicular travel over the rails.

(7) Note. For methods of making rail-bonds and/or for attaching them to the rails, see the appropriate method classes, especially those in the Search Class notes below.

SEE OR SEARCH THIS CLASS, SUBCLASS:

10+, for electrical connection features associated or designed for use with portable track.

14.4+, for mechanical joints provided with additional claimed features designed primarily to improve the conducting path between the rails (see (3) Note above).

151+, for mere mechanical joints designed to join two railway rails together in aligning relation for maintenance of the continuity of the track are in this class, subclass even though such joints, when made of metal, inherently serve to electrically connect the rails.

SEE OR SEARCH CLASS:

29, Metal Working, subclasses 505+ (see (7) note above).

191, Electricity: Transmission to Vehicles.or electrical connection devices specially designed for transmitting electricity from a rail or other element to a vehicle or other moving object (see (5) Note).

219, Electric Heating, subclasses 53+ (see (7) note above).

228, Metal Fusion Bonding, appropriate subclasses (see (7) note above).

403, Joints and Connections, for mere joints or couplings between wires, rods, bars and the like, or between such elements and a base, plate of head; subclasses 230+ where the rail or other surface track element is included broadly, as by name only, with no further limitation distinguishing the same from plates, bars, etc. (also see (6) Note above).

439, Electrical Connectors, appropriate subclasses for electrical connectors in general (see (4) Note above.

14.1 This subclass is indented under subclass 14.05. Electrical connections in which a plurality of rail-bonds extends from one rail to the other, or in which a single rail-bond consists of a plurality of laminations, strands, or other elements extending from one rail to the other.

(1) Note. This subclass does not include rail-bonds consisting of a single stranded cable. Also see the Search This Class, Subclass notes below.

SEE OR SEARCH THIS CLASS, SUBCLASS:

14.05+, when rail-bonds consisting of a single stranded cable are classified in accordance with their other characteristics.

SEE OR SEARCH CLASS:

174, Electricity: Conductors and Insulators, subclass 128.1 and indented subclasses.or mere plural-strand conductor structure.

403, Joints and Connections, appropriate subclasses, particularly subclasses 230+ for mere joints between two or more bond wires, rods, etc., and rail.

14.11 This subclass is indented under subclass 14.1. Plural bond connections in which at least one bond is positioned at each side of the rail.

14.12 This subclass is indented under subclass 14.05. Rail bonds having claimed features pertaining to the form, structure, or arrangement of the intermediate portion of the bond, i.e., the portion between the terminal or attaching portions.

(1) Note. In addition to bonds of novel configuration or cross-section, this subclass also includes bonds having connectors, vibration dampers, or other appurtenant devices associated with the intermediate portion of the bond.

(2) Note. For mere laminated or plural strand bonds, see this class, subclass 14.1.

(3) Note. For mere conductor structure, see Class 174, Electricity: Conductors and Insulators, subclass 126.1 and indented subclasses.

14.13 This subclass is indented under subclass 14.05. Joints or couplings between a rail-bond and the head or tread portion of a rail.

(1) Note. For such joints or couplings involving special rail forms, see this class, subclass 14.3.

(2) Note. See Notes (6) and (7) to the definition of subclass 14.05 of this class.

14.14 This subclass is indented under subclass 14.05. Joints or couplings between a rail-bond and the base or flange portion of a rail.

(1) Note. For such joints or couplings involving special rail forms, see this class, subclass 14.3.

(2) Note. See Notes (6) and (7) to the definition of subclass 14.05 of this class.

14.15 This subclass is indented under subclass 14.14. Joints or couplings in which the rail-bond is attached to the rail-base or flange by casting, welding, soldering, brazing, or other method requiring the use of molten material, or cement, or other adhesive.

(1) Note. See Note (7) to the definition of subclass 14.05 of this class.

(2) Note. For folded joints between wires, cables, rods and the like and a base member, in general, see Class 403, Joints and Connections, subclasses 265+.

14.2 This subclass is indented under subclass 14.05. Electrical connections for connecting a rail to some object or device other than a contiguous rail.

(1) Note. This subclass includes, for example, “cross-bonds” for connecting a rail to the parallel rail at the opposite side of the track, connections between rails and “bootlegs”, ground connections, etc.

(2) Note. This subclass does not include mere joints between a rail and a conductor wire, cable, bond, etc., for which see particularly this class, subclasses 14.13, 14.14 and 14.15, and note 6 to the definition of subclass 14.05.

14.3 This subclass is indented under subclass 14.05. Electrical connections involving some special rail structure, i.e., a rail having a claimed form or structure distinguishing the same from the strandard T-head rail.

14.4 This subclass is indented under subclass 14.05. Electrical connections combined with means for supporting the rail, or combined with means for mechanically joining two rails in aligning relation for maintenance of the continuity of the track, such as splice bars, fish plates, ties, chairs, etc.

(1) Note. See Note 3 to the definition of this class, subclass 14.05.

14.5 This subclass is indented under subclass 14.4. Combinations in which the electrically conducting element is interposed or positioned between the rail and its support, or between the rails and one of the elements of the mechanical joint, for example, between the rail and the splice bar.

14.6 This subclass is indented under subclass 14.5. Combinations in which the interposed conducting element is positioned along the web of the rail.

14.7 This subclass is indented under subclass 14.4. Combinations having means for securing or supporting the intermediate portion of a rail bond, i.e., the portion between the attaching or terminal portions.

(1) Note. For bond-wire supports claimed, per se, see Class 248, Supports, subclass 65 and indented subclasses.

14.8 This subclass is indented under subclass 14.05. Electrical connections including a dowel pin, key, or similar element inserted in aligned holes of sockets formed in the abutting ends of the rails.

(1) Note. For mere mechanical rail-joints employing similar elements, see this class, subclass 179.

(2) Note. For mere rod joints or couplings employing similar elements, see Class 403, Joints and Connections, subclasses 292+.

14.9 Devices for protecting the rail bond or its terminal portions from mechanical injury, including means for deflecting parts of rolling stock away from the bond.

(1) Note. For arrangements whereby the bond is enclosed or protected by elements of a rail-joint or support, see this class, subclass 14.4 and indented subclass.

(2) Note. For protective boxes or closures designed to protect rail-joints or other surface track elements, see this class, subclass 312.

15 Curved rails and rail arrangement for facilitating the passage of railway rolling-stock around curves.

16 Rails on curves provided with antifriction-rollers for engagement with the vehicle-wheels.

SEE OR SEARCH CLASS:
492, Roll or Roller, for a roll, per se, not elsewhere provided for, and see the notes thereunder.

17 Rails arranged parallel to and adjacent the traction-rails to prevent the vehicle-wheels from leaving the traction-rails.

18 Guard-rails adapted to yield laterally against spring resistance when engaged by a vehicle-wheel.

19 Guard-rails having integral parts underlying the adjacent traction-rail, so that the weight of the vehicle will tend to hold the guard-rail in place.

20 Rail-chairs or shoes designed to rest upon ties and each support a traction and a guard rail.

21 Rail clamps or yokes each designed to hold a traction and a guard rail. These clamps do not rest upon the ties, but depend between them.

22 Spacing-blocks between the main guard rails.

SEE OR SEARCH THIS CLASS, SUBCLASS:
17, and the preceding subclasses under subclass 17.

23 This subclass is indented under subclass 22. except that the spacing blocks are formed of tapering wedge-blocks for adjustment of the guard-rails.

24 Longitudinal beams and members arranged beneath and parallel with the rails for supporting the latter; also beam members parallel with the rails for stiffening the road-bed structure.

25 This subclass is indented under subclass 24. except that the longitudinal beams are made of concrete or plastic compounds.

26 This subclass is indented under subclass 24. except that the longitudinal members are metallic.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

27 Relative arrangement of cross-ties for support of the rails.

28 Ties diagonally arranged between the rails.

29 Transverse rail-supporting beams or members for parallel railway-rails.

30 Variations in longitudinal form of railway-ties.

(1) Note. Variations in cross-sections of railway-ties are found in this class, subclasses 54 to 81, inclusive.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

31 The ties have joints in the tie-body between the rails.

SEE OR SEARCH THIS CLASS, SUBCLASS:
35, for multiplicity of tie-joints, and 108 for insulated tie-joints.

32 This subclass is indented under subclass 31. except that the joints are flexible or hinged.

33 The ends of the tie are pivotally connected to the middle portion of the tie, adjacent each railbase.

SEE OR SEARCH THIS CLASS, SUBCLASS:
279,

34 Each end of the tie is detachably connected to the main tie-body adjacent the rail-seats.

35 The tie is transversely divided into three or more sections.

SEE OR SEARCH THIS CLASS, SUBCLASS:
31, and 32.

36 The tie is made up of a plurality of longitudinal vertical platelike members fastened together.

37 The tie is made up of a plurality of longitudinal horizontal platelike members fastened together.

38 The tie is made up of twin or duplicate longitudinal members usually so connected as to lock the rails thereto.

39 Ties made up of two longitudinal sections, one of which is the complement of the other. Usually one slides into the other. The reciprocal sliding of the two parts locks the rail in place.

40 Ties including a truss-rod and strut or ties of truss form, so as to form a truss in the engineering sense.

SEE OR SEARCH THIS CLASS, SUBCLASS:
86,

41 This subclass is indented under subclass 40. except that the truss is integrally formed.

SEE OR SEARCH THIS CLASS, SUBCLASS:
86,

42 Cross-ties between rails having end portions at right angles thereto and parallel with the rails, which may or may not be rectangular frames.

SEE OR SEARCH THIS CLASS, SUBCLASS:
47,

43 The ties are provided with loop or hook shaped ends adjacent the rail-seats.

44 The ties are provided with Y-shaped or double ends to form extended rail-seats.

45 Ties for supporting rails and switch-stands or track elements other than the rails.

46 Ties structurally modified, so as to practically form portions of rail-joints.

47 Tie modification for rail-joints bridged between two ties.

SEE OR SEARCH THIS CLASS, SUBCLASS:
42,

48 Ties so formed that the top portion, carrying two rails, is adapted to have a spring-yielding movement relatively to the bottom section of the tie.

(1) Note. Spring-bearings in ties, permitting the rails to have spring motion independently of each other, are found in this class, subclasses 283, 284 and 285.

SEE OR SEARCH THIS CLASS, SUBCLASS:
40,

49 Ties in which old rails are utilized to make up the ties.

50 Rods for the cross connection of the rails, stringers, or pot-sleepers.

51 Rods or bars cross-connecting two rails passing beneath and in contact with the rail-bases. These rods are usually between the ties.

(1) Note. Rods adapted to rest upon the ties and provided with flat rail-seats are found in this class, subclasses 116 and 288.

52 The same as subclasses 50 and 51 with turnbuckles for coupling the rod-sections.

53 The same as subclasses 51 and 52 for utilizing nuts and threaded ends other than turn-buckles for adjustments.

54 Cross-sectional forms of integral ties not otherwise classified below.

55 Ties made up of two longitudinal parts of cross-sectional form not otherwise classified below.

SEE OR SEARCH THIS CLASS, SUBCLASS:
38,

56 Ties made up of pairs of channel-bars.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 595 for metallic stock material of uniform thickness and of channel shape.

57 Ties made up of pairs of I-beams.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock of “T” or “I” cross-section.

58 Ties made up of pairs of angle or T irons.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock having an I-type cross-section, and subclass 603 for metallic stock of L-type cross section.

59 Ties made up of singles bars of channel cross-section with downwardly-projecting flanges.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 595 for metallic stock material of uniform thickness and of channel shape.

60 This subclass is indented under subclass 59. except that the channels are made from rolled sheet metal and bent to shape.

61 This subclass is indented under subclass 59. except that the channels are of rolled metallic sections.

62 Ties made of single bars of channel cross-section with upwardly-projecting flanges.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 595 for metallic stock material of uniform thickness and of channel shape.

63 This subclass is indented under subclass 62. except that the channels are made from rolled sheet metal and bent to shape.

64 This subclass is indented under subclass 62. except that the channels are of rolled metallic sections.

65 Ties having cross-sectional form of I-beam shape.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock of "T" or "I" cross-section.

66 This subclass is indented under subclass 65. except that the I-beams are rolled metallic sections.

67 Ties having cross-sectional form of T-shape.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock of "T" or "I" cross-section.

68 This subclass is indented under subclass 67. except that the T-beams are of cast metal.

69 Ties having cross-sectional form of inverted-T shape.

70 Ties formed of longitudinal tubular members.

71 Ties having a plurality of longitudinal tubular apertures therethrough.

72 Ties formed with rectangular tubular apertures therethrough.

73 Ties of rectangular box form with overlapping side plates having vertical telescopic engagement.

74 Ties of rectangular box form having separately-formed top and bottom plates.

75 Ties of rectangular box form having separately-formed bottom plates.

76 Ties of rectangular box form with separate cover-plates.

77 Ties of rectangular box shape formed by folding up a sheet metal.

78 Ties of rectangular box shape integrally formed.

79 This subclass is indented under subclass 78. except that the ties are integrally formed by casting.

80 Ties which are triangular in cross-section.

81 Ties which are circular or elliptical in cross-section.

82 Ties formed longitudinally from corrugated plates.

83 Ties involving nonmetallic substance in their structure.

84 Ties formed of cement, concrete, or other plastic compounds.

(1) Note. For special compositions of plastics for tie manufacture see Class 106, Compositions: Coating or Plastic.

85 Metallic or wooden stiffening members embedded in the interior of plastic-compound ties to strengthen the same.

86 Cement-tie internal-reinforcement members of truss form.

87 Tubular reinforcement members for cement ties.

88 Internal-reinforcement members of cast metal for cement ties.

89 Internal-reinforcement members of rolled metallic sections for cement ties.

90 Internal-reinforcement members of loop form for cement ties.

91 Reinforcing rods and bars for cement ties.

92 This subclass is indented under subclass 91. except that the rods or bars are cross-connected by small frames or wire-tied.

93 Wire-netting, expanded metal, or perforated sheet metal for cement-tie reinforcement.

94 Wire used for cement-tie reinforcement.

95 Exterior metallic protective and strengthening members for cement ties.

96 Metal box casings for cement ties.

97 Tubular casings for cement ties.

98 Side and bottom cover-plates for cement ties.

99 Side casings and top cover-plates for cement ties.

100 Side casings for cement ties.

101 Top cover-plates for cement ties.

SEE OR SEARCH THIS CLASS, SUBCLASS:
116,

102 Top and bottom cover-plates for cement ties.

103 Bottom cover-plates for cement ties.

104 End covers and caps for tubular ties and tie-casings.

105 Rods, bars and blocks for keeping the ties properly spaced apart. These spacers are not designed as rail or load carrying members.

106 Anchor lugs, ribs and flanges on ties for preventing their shifting longitudinally in their beds.

107 Railway-tie, tie-plate and rail insulation.

(1) Note. This does not include rail-joint insulation which may be found in this class, subclasses 152 to 161, inclusive.

108 Insulation for divided metal tie-sections at their joints between the rails.

109 Individual supporting-blocks or pot-sleepers adapted to be embedded in the road-bed or ballast and support the rails. Two of these blocks or pot-sleepers act as a substitute for a tie; but they are not designed to have a cross-beam action, like a tie.

110 The rail-supports are inverted pots or basins.

111 This subclass is indented under subclass 110. , but limited to pots or basins of cast metal.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

112 Each rail is supported on a piece of sheet metal.

SEE OR SEARCH CLASS:
428, Stock Material, or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

113 The sheet-metal rail-support is of inverted-U-shaped form.

114 The rail-support is in the form of tubular section or box-shaped.

115 Each rail is supported on a concrete block.

116 The concrete blocks are connected transversely of the rails by bars, upon which the rails are seated.

117 The concrete blocks are connected transversely of the rails by bars, which latter pass centrally through the concrete blocks.

118 Each rail is supported on a wooden block.

119 Each rail is supported on a pedestal of pier-like form.

120 Each rail-pedestal has a helical or screw base for engagement with the road-bed.

121 Relative arrangement of the rails in a two-rail track.

122 Railway-rails not otherwise classified below.

123 Rails having toothed or rack tread-surfaces, usually for use on steep grades with a locomotive having a cog drive-wheel.

124 Street-railway rails provided with notches or lugs to facilitate the turning out of a wagon from the street-railway track.

125 This type of rail is the standard rail of the railway in the United States. The rail cross-section shows a bulb-shaped head, a vertical web and an extended flat base.

126 This subclass is indented under subclass 125. except that the rail-base has a base-bar insert of inverted-T form.

127 Rails which in cross-section are of inverted U, V, or arc shaped sections.

128 This subclass is indented under subclass 127. except that the rail is integrally formed.

129 Rails formed of trough-shaped members or channel-irons adapted to receive tread-surface fillers of wood or metal, so as to substantially fill the troughs or channels.

130 Rails having expanded flat or bulb heads with single depending vertical webs.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclass 598 for metallic stock of “T” or “I” cross-section.

131 Flat rails without any vertical supporting-webs.

132 The rail heads and bases are identical, so that the rail-treads are reversible.

133 The rail-heads are carried by three webs radiating from a central axis and spaced one hundred and twenty degrees apart. Any one of these heads may be placed upward for traction purposes.

134 Rails tubular in form.

135 The tubular rails are integral in construction.

136 Rails having heads of step-tread form for street-railway use, so that the wheels of street-vehicles may run upon the depressed tread-surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:
130,

137 The rail-heads have single vertical webs bifurcated at the lower portions, forming pairs of diverging webs or feet.

138 The under side of the rail-base is reinforced by bars or plates, which, with the rail, make together a compound rail.

SEE OR SEARCH THIS CLASS, SUBCLASS:
26,

139 The vertical webs of the rails are reinforced by the attachment of side bars thereto.

140 Street-railway rails of the grooved type, with the flanged-guard detachable, and step-tread rails having detachable steps.

141 Rails having their bases and webs split vertically.

SEE OR SEARCH THIS CLASS, SUBCLASS:
142,

142 Rail-head treads split vertically through the tread-surface.

143 Rails in which the head is detachable from lower portion of the rail.

144 Compound rails in which the heads and bases each have projecting webs, which are lap-connected.

145 The rail-heads have pairs of projecting webs or single-grooved webs for connection to the rail-bases.

146 Compound rails, the base portions being grooved for the reception of the upper portions of the rails.

147 Compound rails having twin-angle base-sections, between which the rail-head web is clamped.

148 Special formation of rail tread-surfaces for effective engagement with wheel tread-surfaces.

(1) Note. For rail tread-surfaces with rollers see this class, subclass 16.

149 Variations in the web form of rails.

150 Materials, substances, compositions, or alloys for rails.

SEE OR SEARCH CLASS:

75, Specialized Metallurgical Processes, Compositions for Use Therein, Consolidated Metal Powder Compositions, etc., appropriate subclasses for rails claimed broadly by name only and defined solely by their metal or alloy composition even though there is no claim to the metal or alloy, per se. Metal or alloy compositions used in rails are also found in Class 75.

148, Metal Treatment, appropriate subclasses for rails claimed broadly by name only and defined significantly or broadly solely by their metal or alloy composition and including a specific Class 148 treatment of the metal or alloy, or for products distinguished only by the internal structure or characteristics of the metals, metallic compositions or alloys comprising such structures.

428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

151 Means for joining two railway-rails together in aligning relation for maintenance of the continuity of the track.

SEE OR SEARCH THIS CLASS, SUBCLASS:

14.4+, for rail-joints combined with means for electrically joining the rails.

152 Insulating means for rail-joints to prevent electric current from passing through the joint from one to the other of the joined rails.

153 The rail-joint members of the transverse-abutting type, with insulation between the abutting faces.

154 Insulated rail-joints of the chair type include base-seats for the abutting rail ends and a flange on one or both sides of the rail ends made integral with a base seat portion.These flanges project upwardly and are higher than the highest portion of the rail-base section.

155 Insulated rail-joints of the twin-chair type, the two parts of which are in underlapping engagement with the rail-base.

156 This subclass is indented under subclass 155. , but using a separate base-plate upheld by the twin-chair sections or in which the twin-chair sections are base bolted together.

157 Insulated joints of the angle-chair type in which the rail ends are seated on one of the angle-flanges and the other angle-flange projects upwardly along the side of the rail ends.

158 Insulated joints of the Weber type in which a yieldable joint of splice-bar type is supported upon an angle-chair.

159 Insulation-joints of the splice-bar type. These bars are either plates bolted to the rail-webs or these plates may have angular extensions resting upon the tops of the rail-base sections.

160 This subclass is indented under subclass 159. with the additions of a base-plate underlying the rail-bases.

161 This subclass is indented under subclass 159. Insulated rail-joints are seated in channel-iron sections which may be integral or made up of two angles underlying the joint.

161.5 This subclass is indented under subclass 151. Rail joints which include means associated therewith for confining or receiving a liquid, a liquid bearing substance, or any film forming material which serves as a lubricant.

SEE OR SEARCH THIS CLASS, SUBCLASS:

163, for rail joints that contain solid material which was positioned within the joint while in a molten or plastic state.

SEE OR SEARCH CLASS:

184, Lubrication, subclasses 3.1+ for apparatus for applying lubricant to a rail, subclass 5, for slide bearings having lubricating means incorporated therein, and subclass 100 for slide bearing lubricators.

384, Bearings, subclass 13 for a linear bearing having lubricating means incorporated therein.

439, Electrical Connectors, subclasses 41+ for an electrical connector with vacuum applying means; subclasses 190+ for an electrical connector having a retainer or passageway for fluent material; and subclasses 519+ for an electrical connector with provision to restrict environmental effects thereon.

162 The joint is formed by casting molten metal around the abutting rail ends.

163 After the rail-joint is in place a molten filler, usually zinc or lead is poured in between the joint members and the rail ends.

164 The rail ends may be welded together or the joint members may be welded to one or both of the rail ends.

165 Rail-joints for swinging switch-rails constructed to allow a slight pivoting or yielding action.

166 Hinged or pivoted joints permitting vertical or lateral angular movement between connected rail ends.

SEE OR SEARCH THIS CLASS, SUBCLASS:

174, for articulated rail-joints permitting parallel movement of rail ends.

167 Rail-joints for connecting abutting rail ends which differ in cross-sectional contour or size.

168 Rail-joints in which a longitudinal tension-rod appears as a truss element.

169 Rail-joints having auxiliary beam members parallel to the rails for stiffening the joint.

(1) Note. This subclass does not include any beam or stiffening members upon which the rail-joint rests.

170 The weight of the rail ends and load thereon tends to clamp the joint members more tightly to the rail.

SEE OR SEARCH THIS CLASS, SUBCLASS:

194, and 279

171 Expansion-joints in which one rail end is deflected laterally by the other rail end to permit unavoidable rail-creeping.

172 Devices for vertical adjustment of the rail-joint or one of the rail ends.

SEE OR SEARCH THIS CLASS, SUBCLASS:

168, and 215.

173 Rail-joints in which provision is made to permit one rail end to yield vertically independently of the other abutting rail end.

174 Vertically-shifting rail-joints for use with turn-bridges, turn-tables, track-scales, etc., where the level of the abutting rail ends is variable.

175 Rail-joints for rails of unusual cross-sectional shape.

176 Rail-joints for rails channel-shaped in cross-section.

177 Vignoles rails with the base-sections cut off adjacent the rail ends, thus leaving a T-section, and T-section rails engaging a base-joint member with upwardly-projecting U-flanges.

178 Rail-joints for flat or webless rails.

179 The key joining the rail ends is entirely enclosed in the interiors of the abutting rail ends.

180 The key is located in the webs of the abutting rail ends and is flush with the sides of the webs over which splice-bars may be placed, or the keys alone may constitute the joint members.

181 The web-key passes transversely through and bridges both recessed rail-webs and passes at least partially through the rail splice-bars.

182 The lug-key bridges recessed abutting rail-webs and is integral with one splice-bar.

183 The lug-key bridges recessed abutting rail-webs and is integral with both splice-bars.

184 Lugs integral with the joint members and passing through or partially through the rail-webs, but not so that a single lug bridges the abutting rail ends.

SEE OR SEARCH THIS CLASS, SUBCLASS:
182,

185 Rail-joint plates fitting the rail-web, over-lapping the top of the rail-base, and having a downwardly-extending stiffening-flange which in no way furnishes a support for the under side of the rail-bases.

186 This subclass is indented under subclass 185. with the exception that the downwardly-extending stiffening- flanges are connected together, but without effecting engagement with the underside of the rail-base.

187 Rail-joints having base-sections upon which the rails are adapted to seat and further provided with one or more upwardly-extending flange-like members adjacent one or both sides of the rails.

SEE OR SEARCH THIS CLASS, SUBCLASS:
154,

188 This subclass is indented under subclass 187. except the joint members are in two similar sections with their base-sections each extending underneath the rail-bases.

SEE OR SEARCH THIS CLASS, SUBCLASS:
155,

189 This subclass is indented under subclass 188. except that the sections under the rail-base having depending stiffening members.

190 The twin-joint members underlap and uphold a single base-plate.

SEE OR SEARCH THIS CLASS, SUBCLASS:
156,

191 The chair parts are secured together by bolts or other fastenings under the rail-base and also girder-type twin chairs which engage the bottom of the rail and have the girder-flanges connected.

SEE OR SEARCH THIS CLASS, SUBCLASS:
156,

192 The twin-joint members overlap either laterally or vertically beneath the rail-bases.

193 The twin-joint members interlock beneath the rail-bases.The interlocking may be flanged, lugged, or hooked.

194 This subclass is indented under subclass 193. with the addition of longitudinal keys for locking the members together.

195 An angle-chair has a horizontal flange under the rail-bases and an upright flange parallel to and adjacent the rail-webs.

SEE OR SEARCH THIS CLASS, SUBCLASS:
157,

196 The upright flange of the angle or splice bar is pivoted to the base-plate.

SEE OR SEARCH THIS CLASS, SUBCLASS:
209, and 210.

197 The upright flange of the angle or the splice-bar is connected to the base-plate by lugs or fingers interlocking therewith.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
209, and 210.

198 The upright flange or the splice-bar has a longitudinal or dovetailed sliding locking engagement with the base-plate.

199 The rigid angle-chair cooperates with a splice bar which underlaps the free edge of the angle base-plate.

200 A complete splice-bar joint carried on an angle-chair with a lateral cushion between the parts.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
158,

201 The angle-chair cooperates with a splice-bar which is guided by and is slidable toward the rails.

202 This subclass is indented under subclass 201. with the addition of screw-operated means for sliding the splice-bar.

203 This subclass is indented under subclass 201. with the addition of horizontal wedge means for sliding the splice-bar.

204 This subclass is indented under subclass 201. with the addition of vertical wedge means for sliding the splice-bar.

205 The rail-joint is formed of a base-plate with upright side flanges forming a channel- shaped member fitting and carrying the rail ends.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
154,

206 This subclass is indented under subclass 205. with the addition of a base-plate filler inserted between the rail bottom and the joint-base.

207 This subclass is indented under subclass 205. with the addition of a filler member or wedge inserted between the side of the rail and one of the upstanding joint-flanges.

208 This subclass is indented under subclass 207. except that filler inserts or wedges are used on both sides of the rail and inside the channel-shaped joint member.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
161, and 170.

209 Flat plates or blocks for supporting abutting rail ends.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
160,

210 This subclass is indented under subclass 209. with the addition of longitudinal ribs or flanges on the top of the plates adjacent the rail ends.

(1) Note. This subclass excludes such flanges as overlap a splice-bar, which are in subclass 212.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
160, 212 and 257.

211 The angle splice-bars have depending flanges which underflap the sides of the base-plate.

212 The upwardly-projecting flanges on the base-plate overlap the angle splice-bars.

213 Base-plates with girder-flanges or stiffening means.

214 Base-plates of distorted sheet metal for stiffening purposes.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
189,

215 The base-plate is usually depressed at the center and carries a support directly under the abutting rail ends.

216 The base-plate and abutting rail ends have interlocking lug engagement to prevent rail creepage.

217 The rails are secured to the base-plate by side clips.

218 A joint member which takes the load of the traction-wheels off the tread-surfaces of the abutting rail ends.

(1) Note. This subclass includes most of this type in which the rail-sections are not changed.

219 The abutting rail-heads are grooved or recessed to receive a bridging insert.

220 A thin sheet-metal tread covering is placed over the abutting rail ends.

221 The abutting rail-heads are mortised on one side to receive the bridge-piece.

222 The abutting rail-heads are mortised on both sides to receive a pair of bridge-pieces.

223 A tread member including a rail-head with a central or a single side shank is inserted between the abutting rail ends.

224 An inserted rail-head section provided with a pair of legs which straddles the rail-webs.

225 The tread-block inserted between the rail ends takes up the space of the full rail-section.

226 This subclass is indented under subclass 225. except that the tread-block is locked in place by a splice-bar resting against the rail-webs.

227 Filling-in pieces between separated standard-section rail ends.

228 Elastic or expanding fillers between standard-section rail ends.

229 The rail ends are centrally slotted from top to bottom to receive vertical tread-plates.

230 The rail ends overlap each other and are beveled, notched, or mortised to form the joints.

SEE OR SEARCH CLASS:
403, Joints and Connections, subclasses 339+ for scarf joints in general.

231 The specially-shaped rail ends are assembled in joint form by longitudinal movement only.

232 This subclass is indented under subclass 231. except that joined rail ends are exact duplicates.

233 The specially-formed rail ends are assembled by longitudinal movement supplemented with a vertical drop by one of the rail ends.

234 The specially-formed rail ends may be assembled by either a longitudinal or vertical movement of the rail ends.

235 The specially-formed rail ends are assembled by vertical movement only.

SEE OR SEARCH THIS CLASS, SUBCLASS:
177, and 216.

236 The specially-formed rail ends may be assembled laterally to form the joint.

237 This subclass is indented under subclass 236. except that the specially-formed rail ends are duplicates.

238 This subclass is indented under subclass 236. , except that the integral engaging parts prevent the longitudinal separation of the rails.

239 This subclass is indented under subclass 238. except that the specially-formed rail ends are duplicates.

240 The specially-formed rail ends can only be assembled by angular positioning of the rails relatively to each other.

241 This subclass is indented under subclass 240. except that the specially-formed rail ends must be arranged in longitudinal angular relation to assemble the joint.

242 This subclass is indented under subclass 240. except that the specially-formed rail ends must be arranged in lateral angular relation to assem-

ble the joint. This relative angular movement means on axial adjustment of one rail about its longitudinal axis.

243 Splice or angle bars for rail connections which fit the rail-webs and may cover the rail-base tops.

SEE OR SEARCH THIS CLASS, SUBCLASS:
159, 160, 212, and 263.

244 The splice-bar element filling the rail fishing-space or abutting the rail-web is composed of several parts.

245 The splice-bar is made up of two parts forced into the rail fishing-space by movement like straightening a toggle-joint.

246 The splice-bars are slid into position longitudinally and are held in place by guides integral with the rail.

SEE OR SEARCH THIS CLASS, SUBCLASS:
226,

247 This subclass is indented under subclass 246. except that the splice-bar guides are detachable from the rail ends.

248 The splice-bars slide in sleeves attached to the rail ends.

249 The splice-bars are bolts or rods which pass through sleeves formed on or secured to the rail ends.

250 One splice-bar carries looped lugs which pass through the rail-web, and the other splice-bar passes through the looped lugs.

251 One splice-bar has bayonet-slots for slidable locking engagement with a bolt or a lug on the other splice-bar.

252 Two splice-bars with an auxiliary slotted locking-plate which engages the bolt-heads. These plates may slide vertically or horizontally.

253 Splice-bar joints with transverse keys engaging apertures or notches in the bolts.

254 One edge of the splice-bar engages in a groove or recess in a rail and pivots in this recess to seating position.

255 The splice-bars are seated and held by a cam fastening.

256 The U-bars span the joint, and the legs pass through the rail-webs. The loops span the joint.

SEE OR SEARCH THIS CLASS, SUBCLASS:
378,

257 The angle-bars have their outer lower edges beveled upwardly and outwardly.

258 The splice-bars are thickened at the middle and taper toward the ends.

259 The splice-bars are spring members or spring-supported. This does not include mere spring-washers.

260 Fastening devices for splice-bars and rail-joints not otherwise classified.

SEE OR SEARCH THIS CLASS, SUBCLASS:
181,

261 Special fastening for splice-bar bolts. The double keys are usually duplicates reversely arranged.

262 Nut and bolt locks for rail-joints not otherwise classified in which a substantial modification of a rail-joint member forms a part of the nut or bolt lock.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 81+ for a threaded fastener (i.e., a bolt or nut) and means for restricting the rotation thereof relative to a coacting substructure (e.g., the substructure may be the splice bar of a rail joint).

263 The clamp member passes underneath the rail-base and engages the splice-bars or joint members to bind them against the rail.

264 Rail seats or supports other than tie-plates adapted to support a rail on a tie, pot-sleeper, or stringer.

265 Rail-seats with base-anchors adapted to be embedded in concrete.

266 Rail-chairs for holding reversible rails. The heads and bases of the rail are alike.

267 Rail-seats for T-rails having no base-flanges.

SEE OR SEARCH THIS CLASS, SUBCLASS:
177,

268 Rail-seats for T-rails.

SEE OR SEARCH THIS CLASS, SUBCLASS:
176,

269 Rail-seats of cast metal.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

270 Rail-seats cast integrally with a tie.

SEE OR SEARCH THIS CLASS, SUBCLASS:
30,

271 Cast-rail-seats with flat or plane tops.

272 Rail seats of wrought or sheet metal.

SEE OR SEARCH CLASS:
428, Stock Material or Miscellaneous Articles, subclasses 544+ for nominally claimed metallic track, that is, having some structural description, but insufficient to limit its use to that of a railway track, element, adjunct or material.

273 Wrought or sheet metal rail-seats made integrally with a tie.

274 Wrought or sheet metal rail-seats having flat or plane tops.

275 Twin-section rail-seats divided under the rail base and usually having flanges extending over the rail base-flanges.

276 This subclass is indented under subclass 275. except that the jaws are made of wrought or sheet metal.

277 Pivoted rail-supporting seats.

278 Half or the rail-seat is formed on the tie or stringer, and the other half of the rail-seat is laterally applied and has a flange to engage the top of the rail-base.

279 The weight of the rails acts upon the seat members through levers, wedges, or rocking elements to hold the rail to its seat.

SEE OR SEARCH THIS CLASS, SUBCLASS:
170,

280 The saddle is a rectangular frame two sides of which pass under the rail-base and the other two sides of which pass over the tie tops and engage the edges of the rail-base. The saddle does not uphold the rail.

281 Rail-seats which may be vertically adjusted.

SEE OR SEARCH THIS CLASS, SUBCLASS:
172,

282 Rail-seats which may be laterally adjusted

SEE OR SEARCH THIS CLASS, SUBCLASS:
281,

283 Cushions and yielding supports for rails or rail-seats.

284 Metallic springs for supporting rails, either directly or through interposed seats.

SEE OR SEARCH THIS CLASS, SUBCLASS:
302,

285 This subclass is indented under subclass 283. except that wood blocks are used.

SEE OR SEARCH THIS CLASS, SUBCLASS:
118,

286 Wooden blocks upon which rails are seated and into which the rail-holding spikes or fastening penetrate.

287 Tie-plates for use on ties and stringers.

288 Tie-plates cross-connected under both track-rails on top of a tie or a single tie-plate extending under both rails.

289 A tie-plate extending longitudinally under a rail and over a plurality of ties.

SEE OR SEARCH THIS CLASS, SUBCLASS:
209, through 217, inclusive.

290 Tie-plates each composed of a plurality of sections overlapping each other or having laterally-lapping parts in a horizontal plane.

291 This subclass is indented under subclass 290. except that the lapping sections interlock with each other.

SEE OR SEARCH THIS CLASS, SUBCLASS:
193,

292 Tie-plates each carrying a rail-brace engaging the rail-head.

SEE OR SEARCH THIS CLASS, SUBCLASS:
281,

293 Tie plates each having integrally formed therewith a rail-head-engaging brace.

294 A tie-plate with a spike-locking member, usually engaging the top of the spike-head.

295 A tie-plate engaging a locking lug or recess on a spike.

296 Tie-plates with pawl-locks for the spikes.

297 Bolts, lugs and prongs for fastening tie-plates to the ties.

298 This subclass is indented under subclass 297. except that tie-plate-anchoring members are integrally formed with the tie-plate.

299 Tie-plates having depending flanges engaging the outer sides or end of a tie.

SEE OR SEARCH THIS CLASS, SUBCLASS:
305,

300 Tie-plates have depending parts surrounding the under side of the tie.

SEE OR SEARCH THIS CLASS, SUBCLASS:
314,

301 Tie-plates adapted to be used either side up.

302 Tie-plates adapted to act as springs or cushions.

303 Tie-plates for use with screw-spikes.

304 Top-surface form and attachments for tie-plates.

SEE OR SEARCH THIS CLASS, SUBCLASS:
292, 293, 299, 301, and 303.

305 Tie-plates adapted for slight rotation when placed in final seated position. The rotation locks the rail in place.

306 Form variation for rail-seating surfaces on tie-plates.

307 Special contours or outline-forms for tie-plates.

308 Relative arrangement of spike-holes in tie plates.

309 Tie-plates with means for bracing the spike-shanks.

310 Fastenings not otherwise classified for railway-track structure.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
14.05+, particularly subclasses 14.13, 14.1 and 14.15 for fastenings designed to secure a rail-bond or other electric connector to a rail.

311 Fastening by welding.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
16,

312 Boxes and closures for protection of rail-joints and other track elements.

(1) Note. For protective devices limited to the protection of rail-bonds, see this class, subclass 14.9.

313 Rail-fastenings with a continual series of fastening elements on a tie, so that a rail may be detachably secured at any desired point on a tie.

314 Fastening devices have yoke-anchoring devices each surrounding a tie.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
300,

315 Anchoring devices to prevent creepage of rails or to prevent the track structure from displacement.

316 Pawls engaging the rails to prevent creepage.

317 Cams engaging the rails to prevent creepage.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
341,

318 Lug or bolt devices entering rail-recesses to prevent rail-creepage.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
216,

319 Lugged rails to prevent rail-creepage.

320 Distorted rail-base flanges to prevent creepage.

321 Devices for prevention of creepage of rails which abut against the tie sides and which do not support any vertical load.

322 Tie-abutting anticreepers cam-actuated.

323 Tie-abutting anticreepers with transverse rail-base-engaging clips.

324 Tie-abutting anticreepers wedge-actuated.

325 Tie-abutting anticreepers with bevel sliding sections.

326 This subclass is indented under subclass 325. except that each section overlaps the other at one of its ends.

327 Tie abutting anticreepers with twin jaws base-connected.

328 This subclass is indented under subclass 327. with tightening- wedge.

329 Tie-abutting anticreepers with side abutment giving a diagonal or inclined position to the connecting member under the rail-base.

330 This subclass is indented under subclass 329. except that the anticreeper is an integral structure.

331 Rail-fastenings adapted to have transverse sliding movements relatively to the rails.

332 This subclass is indented under subclass 331. except that the slide is operated by a screw.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
202,

333 This subclass is indented under subclass 331. except that the slide is actuated by a horizontal wedge.

SEE OR SEARCH THIS CLASS, SUBCLASS:
203,

334 This subclass is indented under subclass 331. except that the slide is actuated by a vertical wedge.

SEE OR SEARCH THIS CLASS, SUBCLASS:
204,

335 Abutting screw points or ends against rails.

336 Braces abutting rail-heads to hold them in place.

SEE OR SEARCH THIS CLASS, SUBCLASS:
281,
292, 293, for rail-braces mounted on tie-plates.

337 Rail-braces having varying points of engagement with the rail as the rail is shimmed up more or less.

SEE OR SEARCH THIS CLASS, SUBCLASS:
281,

338 Clamps for holding railbases to their seats or supports.

SEE OR SEARCH CLASS:
187, Elevators, Industrial Lift Truck, or Stationary Lift for Vehicle, subclass 408 for means for attaching elevator guide rails to the elevator shaft.

339 Rail-clamping devices interconnected between the two rails.

340 Rail-clamps having a plurality of rail-flange engaging faces for interchangeable or selective use, as in case of rail adjustment.

341 Rail-clamps of cam bolt head or cam type for rail adjustment.

342 Rail-clamps of nut type.

343 Rail-clamps having anchoring-lugs on their bases or rear abutments to hold them in place.

344 Rail-clamps having depending platelike faces to be fastened to tie sides or other vertical faces.

345 Rail-clamps having vertical bolt-like shanks.

346 Rail-clamps having ratchet or step-by-step engagement with their supports for adjustment purposes.

347 Rail-clamps having inclined or beveled guides for longitudinal movement of the clamp to effect lateral adjustment of the rail.

SEE OR SEARCH THIS CLASS, SUBCLASS:
362, and 363.

348 Rail-clamps the rearwardly-extending arms of which enter and pass rearwardly beneath the tie interior and may pass out through the tie at the extreme rear end.

349 Rail-clamps of spring metal or spring metal or spring-pressed.

SEE OR SEARCH CLASS:
187, Elevators, Industrial Lift Truck, or Stationary Lift for Vehicle, subclass 408 for means for attaching elevator guide rails to the elevator shaft.

350 Rail-engaging lugs made integrally with the tie.

351 Rail-fastenings of the clip type usually sprung or driven into position transversely.

SEE OR SEARCH THIS CLASS, SUBCLASS:
217,

352 Rail and tie clips having a jaw engaging over the rail-base flange and a depending jaw at right angles to the first jaw for engagement with a transverse tie.

353 A rail-clip forced to engaging position by a vertical wedge.

354 This subclass is indented under subclass 353. except that the clip is actuated by a horizontal wedge.

355 Hooks for holding a rail to its seat.

356 Pivoted hooks swingable into engagement with a rail-base flange.

357 Vertical hooks in engagement with both sides of a rail-base.

358 This subclass is indented under subclass 357. except that both hooks are held to place by a single through-bolt.

359 This subclass is indented under subclass 357. except that both hooks are pivotally mounted on a single pivot.

360 Rail-clamps of a lever type.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
279,

361 Wedges for fastening rails.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
206, 207, 208, 253, 266, 267, and 324.

362 Parallel wedges usually engaging the opposite sides of a rail for adjustment purposes.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
208,

363 Pairs of aligned wedges for rail fastenings and joints.

364 Wedges for engagement of the edge of the base-flanges of railway-rails.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
21,

365 Locks for wedges involving modification of track elements.

366 Spikes and bolts of such forms as to be capable of use only with track elements substantially modified to cooperate with such spikes or bolts.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
295,

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 439+ for spikes of general application.

367 Spikes adapted to have interlocking engagement with each other in the interior of a tie.

368 Spikes bent in driving for locking purposes.

369 Split-ended spikes for cooperation with special track-fastenings.

370 Plugs into which spikes are adapted to be driven.

371 Sockets for the reception of spikes. These sockets form a portion of the tie structure.

372 Screw-spikes not adapted for general use, but only as track-fastening devices.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
303,

373 Sockets for screw-spikes. These sockets form either a portion of the tie structure or a portion of the rail-seat.

374 Sockets for the reception of a spike or bolt together with a wedge placed in the socket with the spike or bolt.

375 Locking devices for spikes and bolts not adapted for general use, but only for track-fastening devices.

SEE OR SEARCH THIS CLASS, SUB-CLASS:
294, and 295.

376 Ratcheted spikes or bolts adapted for use only with track-fastenings.

377 Bolt-anchors in ties and concrete and bolt-sleeves adapted for use only with track-fastenings.

378 U-bolts and clips adapted for use only with track-fastenings.

(1) Note. These clips differ from those of subclass 351 in that they require bending of ends or additional fastening means to hold them in place.

379 Devices for preventing a person's foot from being caught in frogs, switches, or guard-rails.

380 Devices for preventing a person's foot from being caught by a movable switch-point.

381 Foot-guards which yield and are depressed by the passage of a wheel-flange thereover, but which will not be depressed when stepped upon.

382 Devices for deadening noise in railway-track other than cushion elements for the rails. The latter devices are found in subclasses 283, 284 and 285.

END